

FIG. 2A

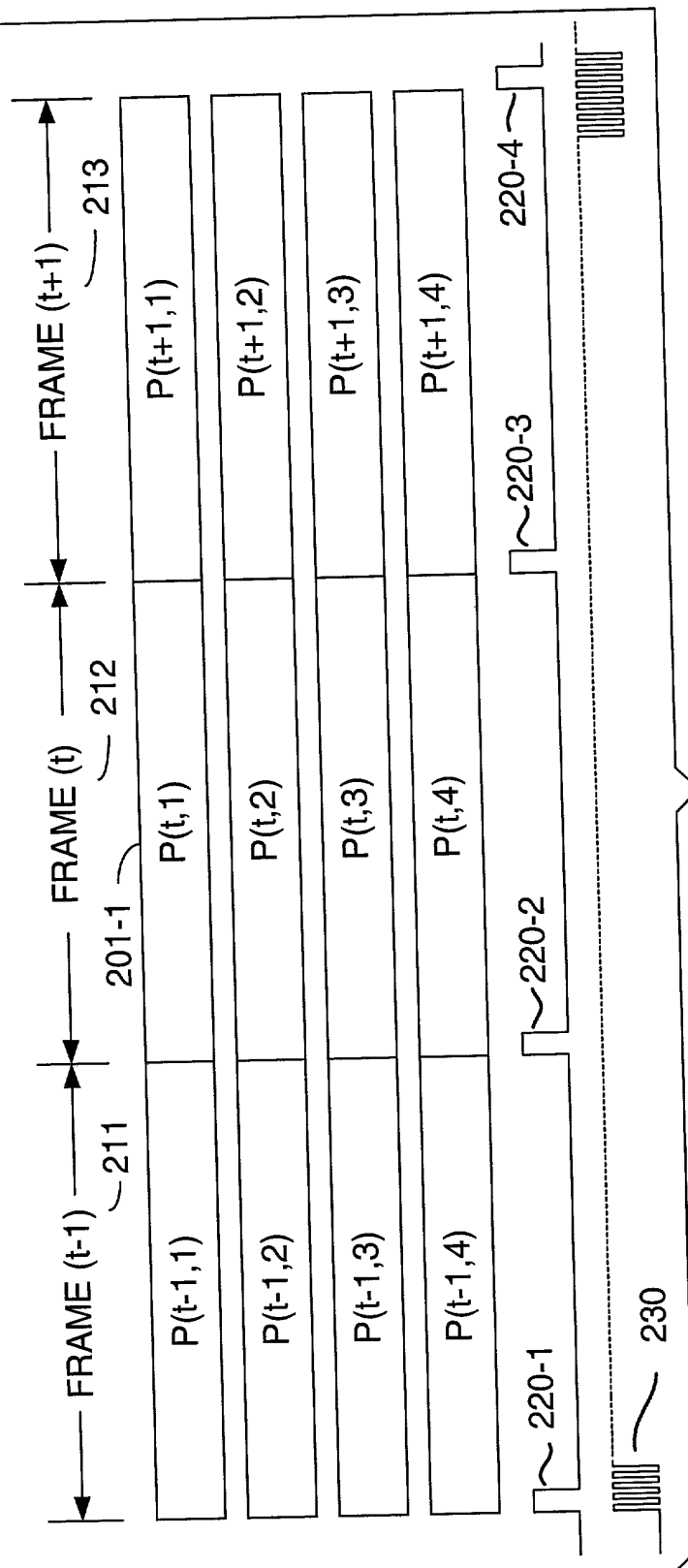


FIG. 2B

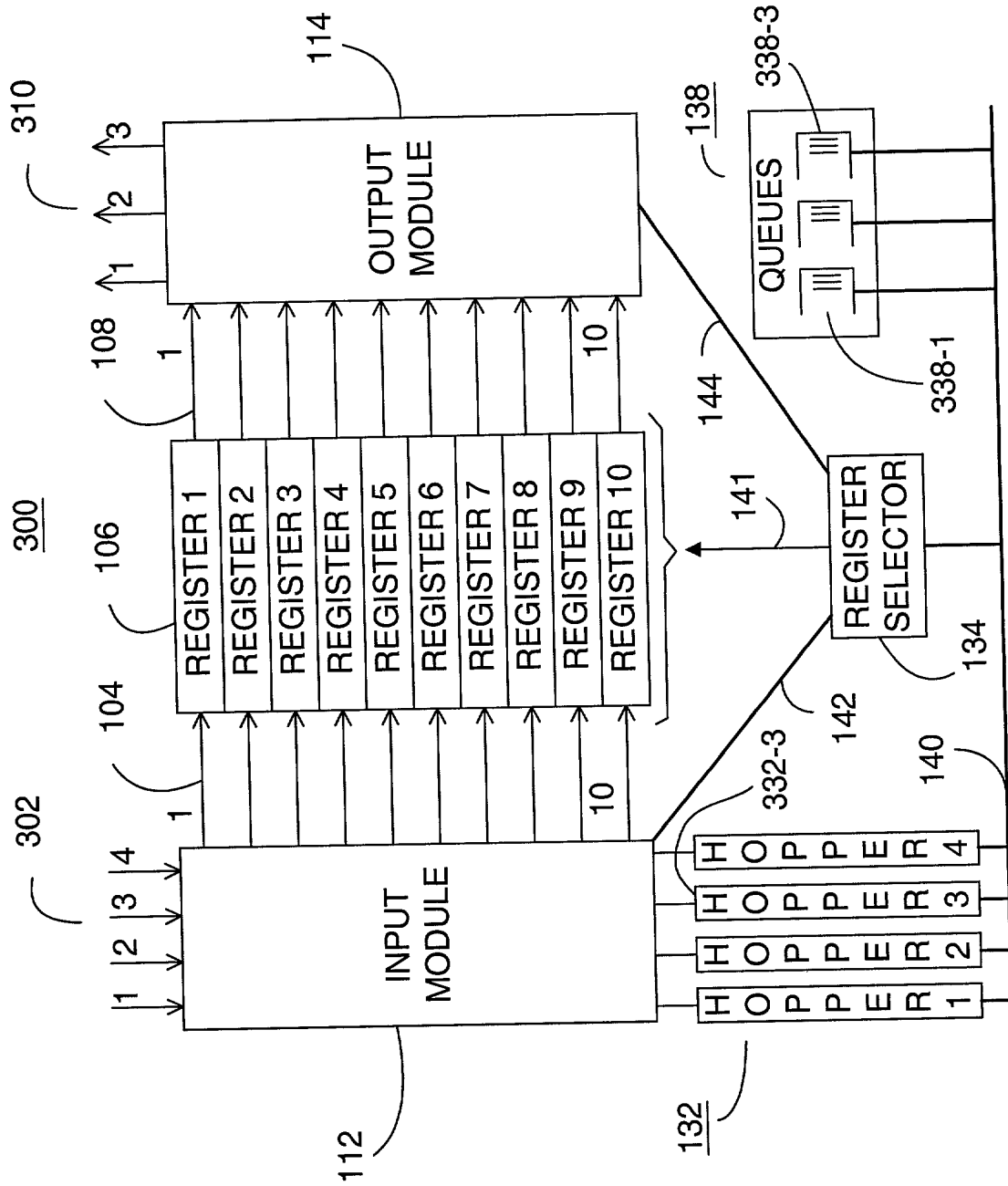


FIG. 3

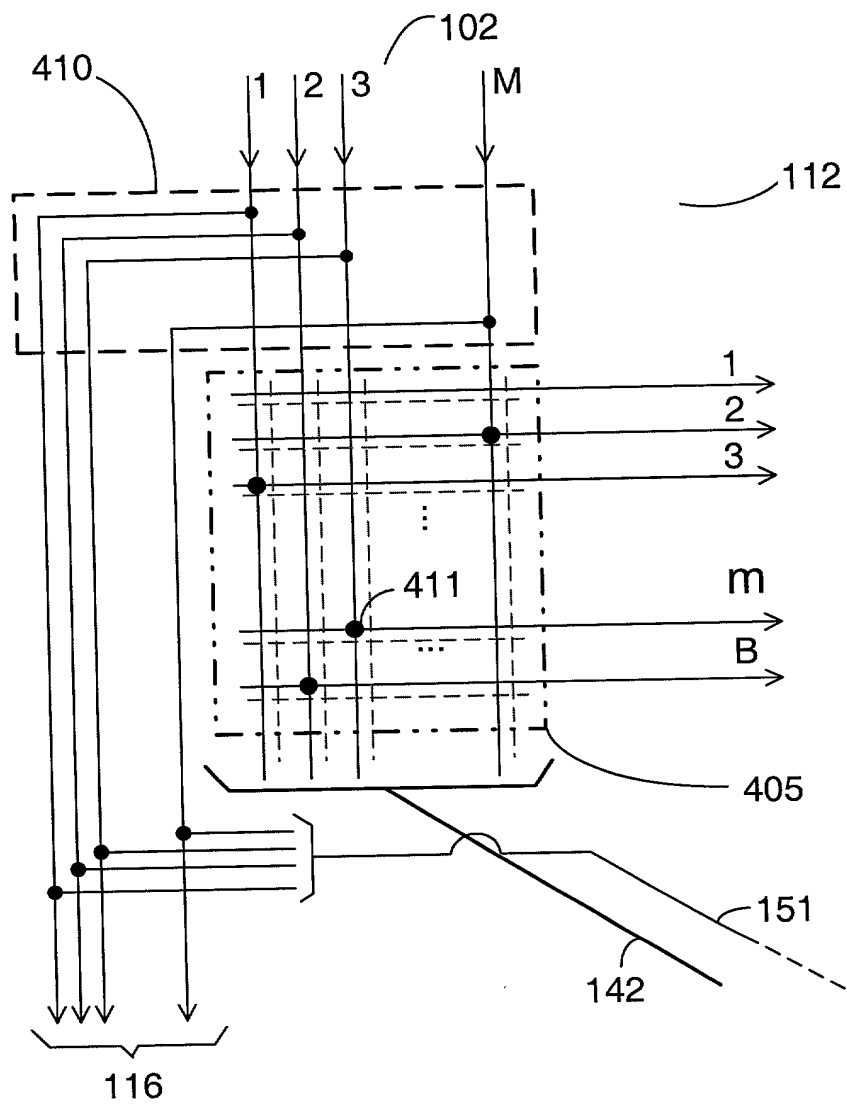


FIG. 4

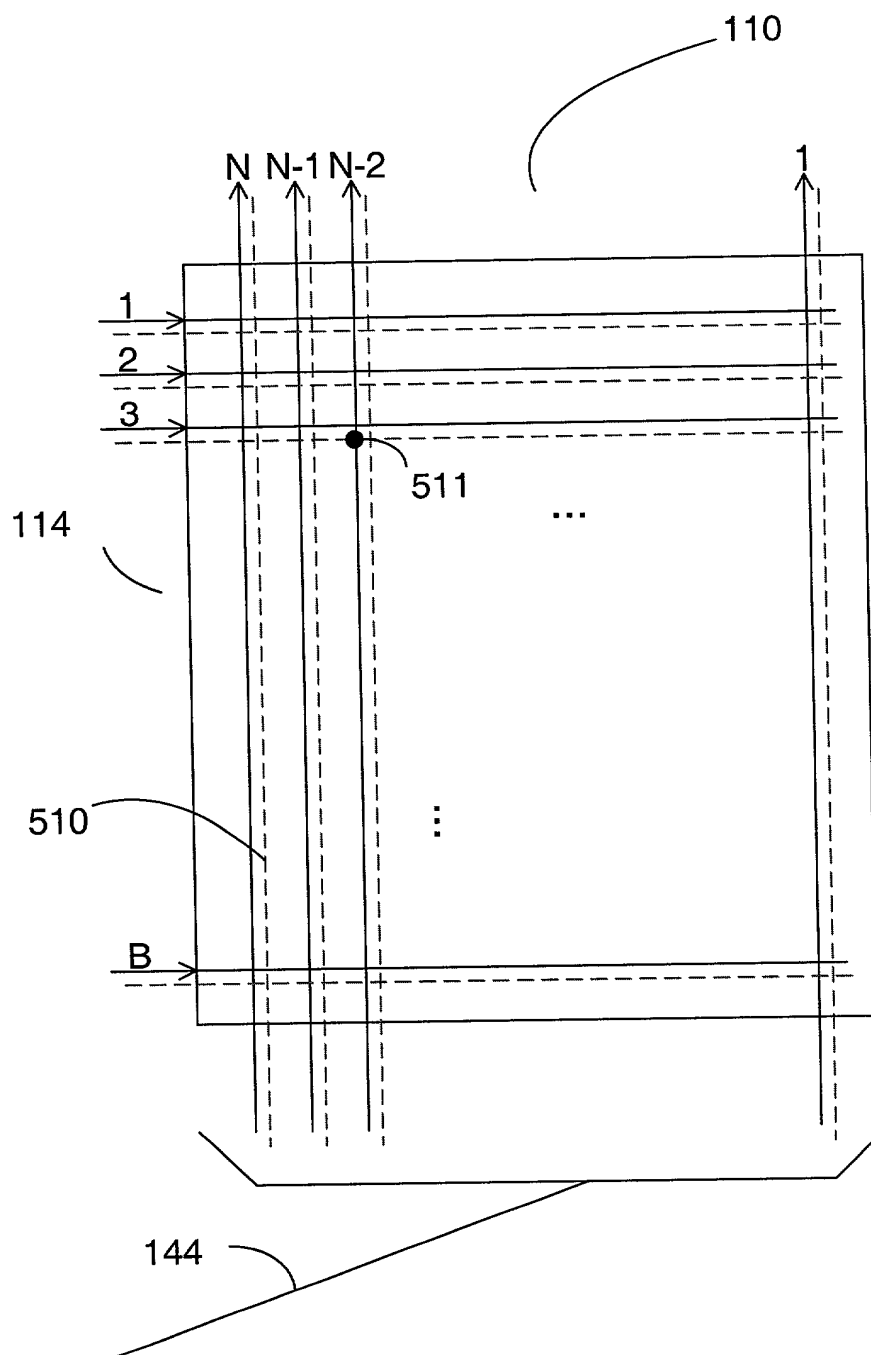


FIG. 5

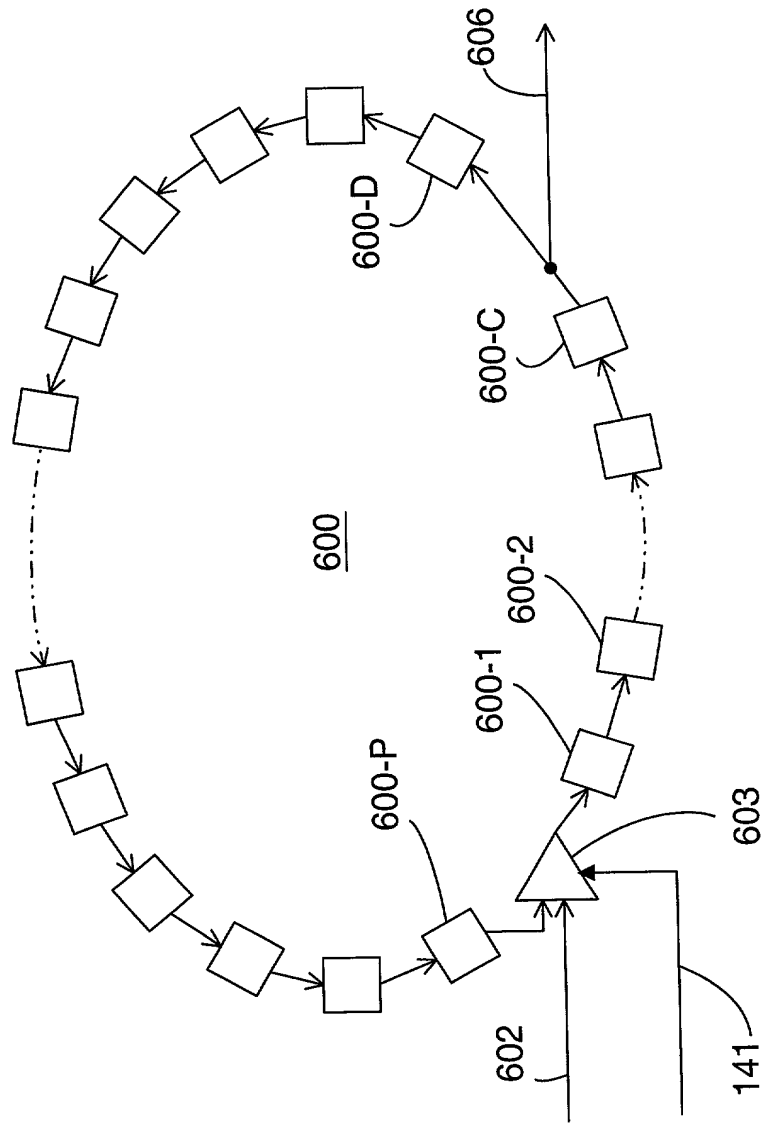


FIG. 6

PRIOR TO THE ARRIVAL OF THE NEXT FRAME, SELECT AVAILABLE REGISTERS IN PACKET BUFFER TO STORE ARRIVING PACKETS IN THE NEXT FRAME

705

SET UP SWITCHING OF INPUT MODULE VIA REGISTER SELECTOR AND TRANSMIT REGISTER ADDRESSES FOR THE ARRIVING PACKETS TO HOPPERS

710

ESTABLISH SWITCHING CONNECTIONS FOR INPUT MODULE

715

STORE PACKETS ARRIVING AT INPUT MODULE INTO ALLOCATED REGISTERS IN PACKET BUFFER AND SEND HEADERS TO HEADER HOP

720

TRANSMIT REGISTER ADDRESSES AND HEADER INFORMATION FROM HOPPERS TO QUEUES CORRESPONDING TO DESTINATIONS IN HEADERS

725

UPDATE QUEUES BASED ON INFORMATION RECEIVED FROM HOPPERS

730

SEND INFORMATION TO REGISTER SELECTOR TO INFORM REGISTER SELECTOR OF DESTINATION ADDRESS(ES) OF PACKETS

735

SELECT A BUFFERED PACKET FOR EACH DESTINATION ADDRESS BASED ON THE QUEUES FOR TRANSMISSION TO OUTPUT PORTS VIA OUTPUT MODULE

740

UPDATE REGISTER SELECTOR WITH ANY REMAINING DESTINATIONS FOR A STORED PACKET AND MARK REGISTER AS AVAILABLE AFTER THE STORED PACKET IS TRANSMITTED TO ALL DESTINATIONS

745

FIG. 7